12 Gauge HE Cartridge

Purpose: To examine this technology and ascertain its potential military utility in close combat missions, particularly combat in urban terrain.

Background: This technology is the result of private development that has completed several years of engineering and testing. The objective of this design is to provide Marines armed with a standard shotgun the capability of defeating reinforced targets, materiel targets, protected targets and other targets requiring a high explosive or armor-piercing warhead.

Description: FRAG-12 rounds are made of standard 3-inch 12-gauge cartridge case and propellant, firing a fin-stabilized 19 mm warhead. The projectile is designed to arm 3 meters from the muzzle and detonates upon impact with a surface. The HE projectile has sufficient explosive power to make one inch holes in ¼ inch cold rolled steel plate. The maximum effective range is claimed to be 200m providing a significant improvement over current shotgun munitions. The round is designed to work in both gas-operated and recoil-operated semiautomatic shotguns. The armor-piercing projectile is a shaped charge and designed to penetrate ½ inch of steel armor. The primary reason for experimentation with these munitions is to improve the utility of shotguns (1) in urban areas, (2) stopping vehicles at readblocks and checkpoints, and (3) remote probing of potential improvised Explosive Devices (IEDs).

Deliverable Product(s): FRAG-12 firing test and safety data; Initial interim safety recommendation; Experimental FRAG-12 rounds for extended user evaluation.

Milestones:

TASKS	FY06	FY07
Extended User Evaluation		
R&D Multishot Device		
T&E Multishot Device		
Analysis & Report		

POC: (703) 432-0458